

Contents

iii Graphical Abstracts

Regular Papers

- | | | |
|--|----|--|
| J. Heinrich, W.A. König, H. Bretting and P. Mischnick (Hamburg, Germany) | 1 | Enantiomer separation of permethylated monosaccharides and 1,5-anhydroalditols and simultaneous determination of linkage positions and absolute configuration in the galactan of <i>Helix pomatia</i> |
| R. Velty, T. Benvegna, M. Gelin, E. Privat and D. Plusquellec (Rennes, France) | 7 | A convenient synthesis of disaccharides containing furanoside units |
| T. Halmos (Villejuif, France), M. Santarromana (Vitry-sur-Seine, France), K. Antonakis (Villejuif, France) and D. Scherman (Vitry-sur-Seine, France) | 15 | Synthesis of <i>O</i> -methylsulfonyl derivatives of D-glucose as potential alkylating agents for targeted drug delivery to the brain. Evaluation of their interaction with the human erythrocyte GLUT1 hexose transporter |
| M. Lahmann and J. Thiem (Hamburg, Germany) | 23 | Synthesis of α -tocopheryl oligosaccharides |
| G. Klich, H. Paulsen, B. Meyer (Hamburg, Germany), M. Meldal and K. Bock (Copenhagen, Denmark) | 33 | Synthesis and characterisation of highly glycosylated glycopeptides with T ⁿ -antigenic structures corresponding to human glycophorin A ^N |
| V. Maunier, P. Boullanger, D. Lafont (Villeurbanne, France) and Y. Chevalier (Vernaison, France) | 49 | Synthesis and surface-active properties of amphiphilic 6-aminocarbonyl derivatives of D-glucose |
| É. Bozó, S. Boros and J. Kuzmann (Budapest, Hungary) | 59 | Synthesis of 4-cyanophenyl 2-deoxy-1,5-dithio- β -D-threo-pentopyranoside |
| R.P. Gorshkova, E.L. Nazarenko, V.A. Zubkov (Vladivostok, Russian Federation), A.S. Shashkov, Y.A. Knirel, N.A. Paramonov, S.V. Meshkov (Moscow, Russian Federation) and E.P. Ivanova (Vladivostok, Russian Federation) | 69 | Structure of the capsular polysaccharide from <i>Alteromonas nigrifaciens</i> IAM 13010T containing 2-acetamido-2,6-dideoxy-L-talose and 3-deoxy-D-manno-octulosonic acid |

Notes

- | | | |
|---|-----|---|
| J. Gigg and R. Gigg (London, UK) | 77 | Reactions of the ketone derived from (\pm)-3,4,5-tri- <i>O</i> -benzyl-1,2- <i>O</i> -isopropylidene- <i>myo</i> -inositol: preparation of racemic derivatives of <i>epi</i> -inositol and of 4- <i>C</i> -methyl- <i>epi</i> -[(\pm)- <i>iso</i> -laminitol] and 4- <i>C</i> -methyl- <i>myo</i> -inositol [(\pm)-laminitol] |
| U. Gambert and J. Thiem (Hamburg, Germany) | 85 | Chemoenzymatic synthesis of the Thomsen–Friedenreich antigen determinant |
| G.K. Moates, T.R. Noel, R. Parker, S.G. Ring, P. Cairns and V.J. Morris (Colney, UK) | 91 | Observations on the crystallization and melting of maltopentaose hydrate |
| T. Shimokawa, S. Yoshida, I. Kusakabe (Ibaraki, Japan), T. Takeuchi and K. Murata (Tokyo, Japan) | 95 | Isolation and quantification of alginate-derived oligouronic acids by fluorophore-assisted carbohydrate electrophoresis |
| K.M. Vårum, M.M. Myhr, R.J.N. Hjerde and O. Smidsrød (Trondheim, Norway) | 99 | In vitro degradation rates of partially <i>N</i> -acetylated chitosans in human serum |
| | I | Announcement |
| | III | Announcement |

iii Graphical Abstracts

Regular papers

- E.A. Luna, E.R.N. Bornancini (Lawrence, KS, USA), D.O. Thompson (Overland Park, KS, USA), R.A. Rajewski and V.J. Stella (Lawrence, KS, USA) 103 Fractionation and characterization of 4-sulfobutyl ether derivatives of cyclomaltoheptaose (β -cyclodextrin)
- E.A. Luna, D.G. Vander Velde, R.J. Tait (Lawrence, KS, USA), D.O. Thompson (Overland Park, KS, USA), R.A. Rajewski and V.J. Stella (Lawrence, KS, USA) 111 Isolation and characterization by NMR spectroscopy of three monosubstituted 4-sulfobutyl ether derivatives of cyclomaltoheptaose (β -cyclodextrin)
- S. Kalelkar, J. Glushka, H. van Halbeek (Athens, GA, USA), L.C. Morris and R. Cherniak (Atlanta, GA, USA) 119 Structure of the capsular polysaccharide of *Clostridium perfringens* Hobbs 5 as determined by NMR spectroscopy
- W.C. Kett, M. Batley and J.W. Redmond (North Ryde, Australia) 129 Heterocyclic derivatives of sugars: An NMR study of the formation of 1-glycosyl-3,5-dimethyl-1H-pyrazoles from hydrazones
- L.E. Elvebak II (Wilmington, DE, USA), V. Knowles and G.R. Gray (Minneapolis, MN, USA) 143 Authentic standards for the reductive-cleavage method. The positional isomers of partially methylated and acetylated or benzoyleated 1,5-anhydro-D-xylitol
- L.E. Elvebak II (Wilmington, DE, USA), P. Wittmeyer and G.R. Gray (Minneapolis, MN, USA) 151 Authentic standards for the reductive-cleavage method. The positional isomers of partially methylated and acetylated or benzoyleated 1,5-anhydro-L-rhamnitol
- S. Oscarson, U. Tedebark and D. Turek (Stockholm, Sweden) 159 Synthesis of colitose-containing oligosaccharide structures found in polysaccharides from *Vibrio cholerae* O139 synonym Bengal using thioglycoside donors
- M.A. Szarek, X. Wu and W.A. Szarek (Kingston, Canada) 165 Synthesis and evaluation of 1,5,6-trideoxy-6,6-difluoro-1,5-imino-D-glucitol (1,6-dideoxy-6,6-difluoronojirimycin) as a glucosidase inhibitor
- P.B. van Seeventer, M.A. Corsten, M.P. Sanders, J.P. Kamerling and J.F.G. Vliegthart (Utrecht, The Netherlands) 171 Synthesis of two analogues of the Sd^a determinant. Replacement of the sialic acid residue by a sulfate or a carboxymethyl group
- P.B. van Seeventer, J.P. Kamerling and J.F.G. Vliegthart (Utrecht, The Netherlands) 181 Synthesis of the Sd^a determinant and two analogous tetrasaccharides
- M.R. Leslie, H. Parolis and L.A.S. Parolis (Grahamstown, South Africa) 197 Structural analysis of the capsular antigen of *Escherichia coli* O8:K41:H11
- A. Müller (Johnson City, TN, USA), H. Ensley, H. Pretus, R. McNamee, E. Jones (New Orleans, LA, USA), E. McLaughlin, W. Chandley (Johnson City, TN, USA), W. Browder (Johnson City, TN, Mountain Home, TN, USA), D. Lowman (Kingsport, TN, USA) and D. Williams (Johnson City, TN, Mountain Home, TN, USA) 203 The application of various protic acids in the extraction of (1 \rightarrow 3)- β -D-glucan from *Saccharomyces cerevisiae*

iii Graphical Abstracts

Regular papers

- M.L. Ramos, M.M. Caldeira and V.M.S. Gil (Coimbra, Portugal) 209 NMR spectroscopy study of the complexation of L-mannonic acid with tungsten(VI) and molybdenum(VI)
- A. Heeres, H.A. van Doren (Groningen, The Netherlands), K.F. Gotlieb (Wildervank, The Netherlands) and I.P. Bleeker (Foxhol, The Netherlands) 221 Synthesis of α - and β -D-glucopyranuronate 1-phosphate and α -D-glucopyranuronate 1-fluoride: Intermediates in the synthesis of D-glucuronic acid from starch
- A. Chiovitti, A. Bacic (Parkville, Australia), D.J. Craik (St. Lucia, Australia), S.L.A. Munro, G.T. Kraft and M.-L. Liao (Parkville, Australia) 229 Cell-wall polysaccharides from Australian red algae of the family Solieriaceae (Gigartinales, Rhodophyta): novel, highly pyruvated carrageenans from the genus *Callophycus*
- W. Karpiesiuk and A. Banaszek (Warsaw, Poland) 245 Stereoselective syntheses of the O,N-protected subunits of the tunicamycins
- T. Michaud, J. Chanet-Ray, S. Chou and J. Gelas (Aubière, France) 253 Synthesis of monosaccharide-fused azetidines

- R. Kuwahara and T. Tsuchiya (Kawasaki, Japan)** 271 Synthesis of 2''-acylamido derivatives of 2''-amino-5,2''-dideoxy-5-epi-5-fluorodibekacin and a study on the structures of 5-fluorinated dibekacin analogs by ^{13}C NMR
- S.-Q. Zhang, Z.-J. Li, A.-B. Wang, M.-S. Cai and R. Feng (Beijing, PR China)** 281 Total synthesis of the phenylpropanoid glycoside, grayanoside A
- R.H. Chen, J.R. Chang and J.S. Shyur (Keelung, Taiwan, ROC)** 287 Effects of ultrasonic conditions and storage in acidic solutions on changes in molecular weight and polydispersity of treated chitosan

Notes

- N. Vukojević (Belgrade, Serbia), B. Perić (Novi Sad, Serbia), T. Dramićanin (Belgrade, Serbia), M. Pop-savin and D. Miljković (Novi Sad, Serbia)** 295 Synthesis of some new deoxy sugar lactone derivatives
- H. Li, H. Hagiwara, W. Zhu, C. Yokoyama and N. Harada (Sendai, Japan)** 301 Isolation and NMR studies of di-D-fructose anhydride III from *Lycoris radiata* Herbert by supercritical extraction with carbon dioxide
- C. Jørgensen and C. Pedersen (Lyngby, Denmark)** 307 Preparation of 2-deoxyaldoses from aldose phenylhydrazones
- I Corrigendum
- III Author index
- V Subject index
- IX Contents

